



SC-PSS Pressure Sensor Solution

SC-PSS is a concealed intrusion detection system, and its performance indicators meet the security requirements. It consists of a sensing device and a communication processor. The sensing device is composed of a protective cover and a built-in sensor, which is connected to the communication processor. The sensing device is triggered by an external force to generate an electrical signal, which is transmitted to the processor for judgment, and an alarm signal is output after confirming intrusion.

It provides high probability of detection (PD) for the security; while maintaining extremely low false alarm and nuisance alarm rates (FAR/NAR)

SC-PSS sensor solution can achieve 0.1kg pressure accuracy requirement. The pressure layer sensing device is made of 17-4PH stainless steel with a protective cover and sealed in secure.

Suitable Application

SC-PSS is the ideal security system for most indoor and outdoor areas. It can be extensively installed in various premises / locations such as:

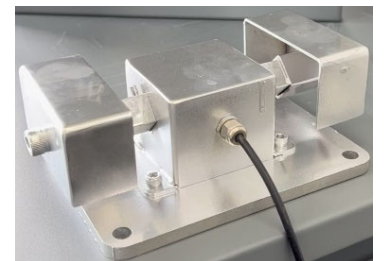
- Residential
- Museum
- In front of Safety Box
- Restricted Zone
- Wall Top
- House Top
- Under the Floor
- Under the Stair Step

Press Layer Sensor Device

- Model: A3-MY
- Working Temperature: -40°C to +85°C
- Protection Level: IP67
- Accuracy Level: 0.1kg
- 5V low voltage operation

Features and Benefits

- High probability of detection (PD)
- Low false alarm & nuisance alarm rates (FAR / NAR)
- Most trust on hidden solid sensor
- Adaptive mechanism, low maintenance cost
- Easy integration with 3rd party security system
- Sustained sensitivity
- Unaffected by adverse weather conditions
- Low power consumption: about 2W per 5KM
- Most hidden, cooperate with design



Working Principle:

SC-PSS consists of press cover plane, built-in sensor, communication processor, alarm host and other key components. The top area of press cover plane sensing device can be customized according to the actual situation, including size, material, bearing weight, etc.

The sensor is set on a concrete wall or on a level ground, it is externally protected by a press shield. Each sensing device includes 2 or more sensors, and the sensors are fixed by expansion bolts. The communication processor can receive the millivolt electrical signal sent by the sensing device, and then process the signal to judge whether to send an alarm message to the Control Center.

Trigger Alarm:

- Applies weight to the preset value on the communication processor
- Signal transmission line short circuit
- Communication Processor is damaged
- Communication Processor Box is opened

Communication Processor:



- Model: SQ-ECD32
- Power supply mode: DC12V to 24V
- Static Power: 3.9W
- Communication Method: CAN bus, dry contact, TCP/IP
- No of channels: 16
- Dry contact input: 4
- Dry contact output: 4
- External alarm output: 12V
- IP Level : IP65

Zoning:

- Per zone length: ≤ 30 meters (recommend)
- Zone geometry: No restriction, end user defined
- Press cover plane: Stainless steel or high strength aluminum alloy
- Color: According to the designer requirement

Performance:

- Power supply mode: DC12V to 24V
- Force to trigger alarm: Around 15KG
- Communication Method: CAN bus, Dry Contact, TCP/IP
- IP Level: IP65
- Waiting time to trigger alarm: ≤ 1 sec, can be end user defined

Working Conditions:

- Temperature Range : -40 to 85°c
- Humidity: 0 to 95%, non condensing

Technical Features:

- Built-in self-checking, self-balancing, self-adaptive functions
- Built-in intrusion alarm, equipment failure and tamper alarm functions
- Built-in lightning protection for both input and output
- Reduce false alarm function: the system will trigger an alarm when it detects an intrusion over the preset time (e.g. 1 sec)